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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-----------------------------------|----------------------|-----------------------|------------------|
| 10/532,927 | 04/27/2005 | Laurent Fay | FR 020111 | 4567 |
| | 7590 12/07/200 LLECTUAL PROPER | EXAMINER | | |
| P.O. BOX 3001 | | | ALPHONSE, FRITZ | |
| BRIARCLIFF | MANOR, NY 10510 | | ART UNIT PAPER NUMBER | |
| | | | 2112 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 12/07/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
|--|--|--|-------------------------|--|--|
| Supplemental | 10/532,927 | FAY ET AL. | | | |
| Notice of Allowability | Examiner | Art Unit | | | |
| | Fritz Alphonse | 2112 | | | |
| The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in this app or other appropriate communication IGHTS. This application is subject to | olication. If not included will be mailed in due c | d ourse. THIS | | |
| 1. \boxtimes This communication is responsive to <u>the amendment filed</u> | <u>on 6/08/2007</u> . | | | | |
| 2. The allowed claim(s) is/are <u>1-10</u> . | | | | | |
| 3. Acknowledgment is made of a claim for foreign priority una) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: | been received. been received in Application No | | on from the | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | | complying with the requ | uirements | | |
| 4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give | | | TICE OF | | |
| 5. CORRECTED DRAWINGS (as "replacement sheets") mus | st be submitted. | | | | |
| (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached | | | | | |
| 1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date | | | | | |
| (b) ☐ including changes required by the attached Examiner's Paper No./Mail Date | s Amendment / Comment or in the C | office action of | | | |
| Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t | .84(c)) should be written on the drawing the header according to 37 CFR 1.121(c | ngs in the front (not the l d). | back) of | | |
| 6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT | | | ote the | | |
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| | <i>ć</i> " | | | | |
| Attachment(s) | <u> </u> | , | | | |
| 1. Notice of References Cited (PTO-892) | 5. Notice of Informal P | atent Application | | | |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. ☐ Interview Summary Paper No./Mail Dat | e | | | |
| 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date | 7. 🗌 Examiner's Amendr | nent/Comment | | | |
| 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. 🛭 Examiner's Stateme | | | | |
| | 9. □ Other: `` SUP | COVES LOVE ACQUES TO VENTER 2 ECHNOLOGY CENTER 2 | INER 100 | | |

DETAILED ACTION

0.1 This Office Action is in response to the amendment filed on 6/08/2007. Claims 1, 2, 4, 7 and 9 are amended.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Yan Glickberg on August 20,2007.

Claim 10:

In claim 10 line 1, after "A program" add ---stored in computer readable medium-

Allowable Subject Matter

2. After further search and through examination of the present application and in view of the prior art of record, claims 1-10 are found to be in condition for allowance.

Reason for Allowance

3. The following is an examiner's statement of reasons for allowance: The invention relates to an adaptive Forward Error Correction scheme (FEC) aiming at providing a resilient transport of data via a packet-switched transmission network.

Application/Control Number: 10/532,927

Art Unit: 2112

To achieve this inventive goal, independent claim 1 identifies the distinct features "the transmitter includes an encoder for generating redundancy packets above the OSI Network Level (OSI Level 3) from media packets so as to provide an error correction capability at the receiver, the correction capability depending on the amount of redundancy generated by the encoder, and the receiver includes an analyser that is configured to analyze packet errors occurring on the transmission network and determine an optimal amount of redundancy that provides an error correction capability allowing to respect a maximum tolerated packet error rate, and is configured to communicate the optimal amount of redundancy to the transmitter for use by the encoder."

Independent claim 4 identifies the distinct features "A receiver for receiving media packets and redundancy packets transmitted by a transmitter via a transmission network having a time-varying state, the redundancy packets being generated from the media packets above the OSI Network Level (OSI Level 3) so as to provide an error correction capability of a certain number of packets at the receiver, the receiver comprising: an analyser for analysing packet errors occurring on the transmission network and for determining an optimal amount of redundancy that provides an error correction capability allowing to respect a maximum tolerated packet error rate, and a feedback device that is configured to feed back the optimal amount of redundancy to the transmitter."

Independent claim 7 identifies the distinct features "an encoder for generating redundancy packets above the OSI Network Level (OSI Level 3) from media packets so as to provide an error correction capability of a certain number of packets at the receiver, the correction capability depending on an amount of redundancy generated by the encoder, and

Application/Control Number: 10/532,927

Art Unit: 2112

the encoder being designed to set the amount of redundancy to an optimal value that gives an error correction capability allowing to respect a maximum tolerated packet error rate defined at the receiver, the optimal value being fed back to the transmitter by the receiver based on prior transmissions from the transmitter."

Independent claims 9 and 10 identifies the distinct features "A method for determining an amount of redundancy to be used in a forward error correction scheme in which redundancy packets are generated from media packets above the OSI Network Level (OSI Level 3) at a transmitter so as to provide a correction capability of a certain number of packets at a receiver, the method comprising: analysing packet errors occurring on the transmission network at the receiver, determining an optimal amount of redundancy that provides an error correction capability allowing to respect a maximum tolerated packet error rate at the receiver, communicating the optimal amount of redundancy from the receiver to the transmitter."

The first cited reference Guha (U.S. Pat. No. 5,699,369) discloses an adaptive forward error correction system. The second cited reference Doshi (U.S. Pat. No. 5,130,986) discloses a high speed transport protocol with two windows. The third cited reference Kang (U.S. Pat. No. 6,615,382) discloses a method for controlling errors in a wireless link layer using a simultaneous multiple copy scheme and an adaptive forward error correction scheme.

However, the features disclosed in this instant application (see independent claims 1, 4, 7, 9 an 10) are neither anticipated nor render obvious by the prior art of record.

These limitations, in conjunction with all other limitations of the base claims were not shown by, would not have been obvious over, would not have been fairly suggested by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's 4. disclosure. See PTO-892.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington, D.C. 20231

or faxed to: (703) 872-9306 for all formal communications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz Alphonse, whose telephone number is (571) 272-3813. The examiner can normally be reached on M-F, 8:30-6:00, Alt. Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques, can be reached at (571) 272-6962.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-3824

Information regarding the status of an application may also be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished Art Unit: 2112

applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2112

August 20, 2007